

## REMARKS

The Examiner is thanked for the performance of a thorough search. By this Amendment, Claims 1, 2, 5, 7, 8, 10, 11, and 12 have been amended. Claims 15 - 25 have been added. No claims have been cancelled. Hence, Claims 1 - 25 are pending in the application.

As a preliminary matter, receipt of the Notice of Draft Persons Patent Drawing Review is acknowledged. Applicant recognizes that the present drawings are acceptable for examining purposes only. Formal drawings will be submitted after completion of the examination process upon issuance of Notice of Allowance.

## SUMMARY OF THE REJECTIONS

In the Office Action, Claims 1-6 and 11-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Claims 7-10 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,129,082 issued to *Tirfing, et. al.* on July 7, 1992 ("*Tirfing*").

## REJECTIONS BASED ON INDEFINITENESS (35 U.S.C. 112)

In the Office Action, Claims 1-6 and 11-14 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Specifically, the Office Action asserted that it was unclear as to where "detection of data modification to a

subset of data is being done", and that "'detecting' was not clearly defined in the specification". (page 2, section 3, par. 2 of the Office Action.) The Office Action also asserts that Claims 1-6 and 11-14 would be allowable if rewritten or amended to overcome the rejections under 35 U.S.C. Section 112. (page 4, section 10.)

Claim 1 has been amended to expressly indicate that the detecting is occurring at the first site (i.e. the site at which are stored the "one or more schemas"). Furthermore, as used in the specification, "detecting" is used in its ordinary sense, with no special meaning. The American Heritage College Dictionary, (Third Edition, 1993) defines detect as "to discover or ascertain the existence, presence or fact of:" There are various mechanisms that may be used to detect modifications to data. One of these mechanisms is through the use of a trigger, as recited in Claim 15. Claim 1 is not limited to any particular detection mechanism.

It is respectfully submitted that Claim 1 as amended particularly points out and distinctly claims the subject matter which Applicant regards as the invention. The Office Action has indicated that Claims 2 - 6 have been rejected as being dependent upon a rejected base claim, Claim 1. (section 3, par. 3, page 3 of the Office Action.) It is respectfully submitted that Claims 2 - 6 are allowable because they depend upon Claim 1 as amended, which is allowable for the reasons stated above. Reconsideration of Claims 1 - 6 as amended is respectfully requested.

Claim 11 has been amended in a manner similar to Claim 1. Therefore, it is respectfully submitted that Claim 11 is allowable for the reasons given with respect to Claim 1. The Office Action has indicated that Claims 12-14 were rejected because they

depend on a rejected base claim, Claim 11. It is respectfully submitted that Claims 12-14 are allowable because they depend on Claim 11 as amended.

#### REJECTIONS BASED ON PRIOR ART

Claim 7 was rejected under 35 U.S.C. 102(b) as being anticipated by *Tirfing*. It is respectfully submitted that Claim 7, as amended, is not anticipated or suggested by *Tirfing*.

Claim 7 as amended requires:

"mapping a subset of data that resides in a schema to an object group;  
mapping said object group to one or more sites of said plurality of sites; and  
creating replicas of said subset of data at each of said one or more sites"

*Tirfing* discloses a mechanism for generating one or more databases of words ("symbols") contained in one or more text files ("source files"). A database associates each word in the database with the one or more lines containing the word in a text file. (col. 5, lines 51 - 62, col. 6, lines 44 - 51) For each text file, a corresponding database file is generated. (col. 11, lines 62 - 66) An index file that is generated is used to locate a word in the one or more database files (col. 5, lines 55 - 56). For example, consider an embodiment described in *Tirfing*:

"Fig. 4b illustrates the structure of the preferred embodiment, wherein two text files, source file A 260 and source file B 270, form the source that is the input to compiler 220 to generate the compiled code 225 and the database, respectively comprising database component file A 280 and database component file B 290,

which are then utilized by the browser 240 to provide the output information 255 which comprises the result of a query to a user." (col. 10, lines 21 - 29)

"The browser 240 generates an index file 250 which provides a reference of symbols and the names of database component files". (col. 10, lines 11 - 13).

While Tirfing discloses generating a subset of data that may correspond to a subset of data from a schema (i.e. database, index table), Tirfing nowhere discloses or suggests replicating any set or subset of data, or any features for supporting such replication. On the other hand, Claim 7 explicitly requires replication of a subset of data from a schema (i.e. "creating replicas"), and features for supporting the replication (i.e. "mapping a subset of data ...to an object group; mapping said object group to one or more sites ...").

The Office Action asserts that Tirfing discloses "creating replicas of data subset to one or more sites (i.e. database A and B files)(Figure 4b, # 280 and 290)." This assertion is respectfully traversed. As discussed earlier, *Tirfing* does not disclose or suggest any method of replication. Database A File 280 is generated from a text file (i.e source A File), and Database B File 290 is generated from another text file (i.e. source B File). (col. 10, lines 21 - 29, see col.11, lines 62 - 66) Neither is a generated as a replica of each other or another file.

Based upon the reasons stated above, it is respectfully submitted that amended Claim 7 is allowable over the art of record.

Claims 8 - 10 depend on Claim 7, and therefore contain all the limitations recited in Claim 7. It is therefore respectfully submitted that Claims 8 - 11 are allowable for the

reasons given above with respect to Claim 7. In addition, Claims 8 -11 recite additional features which render these claims patentable.

For example, Claim 9 requires " maintaining a set of destinations to which said subset of data is replicated." As discussed earlier, nothing in *Tirfing* discloses or suggests data replication, let alone the maintaining of a set of destinations to which data is replicated.

Claim 10 requires " maintaining an object groups table, and maintaining a replicated objects table." As discussed earlier, nothing in *Tirfing* discloses or suggests data replication, let alone the maintaining of an object groups table and a replicated objects table for supporting data replication.

#### NEW CLAIMS

Claim 15 depends on Claim 1. Because Claim 1 is allowable, it is respectfully submitted that Claim 15 is in condition for allowance.

Claims 16 - 18 depend on Claim 11. Because Claim 11 is allowable, it is respectfully submitted that Claims 16 -18 are in condition for allowance

Claim 19 recites limitations similar to those Claim 7. It is therefore respectfully submitted that Claim 19 is patentable for the reasons given with respect to Claim 7.

Claim 20 recites limitations similar to those of Claim 8. It is therefore respectfully submitted that Claim 20 is patentable for the reasons given with respect to Claim 8.

Claim 21 requires:

"adding one or more replicated objects to said one or more replicated

object groups to register said one or more replicated objects for

replication, said one or more replicated objects corresponding to  
data from one or more groups of formatted data; and  
creating replicas of said one or more replicated objects at a second site"

As mentioned before, *Tirfing* nowhere discloses or suggests replicating any set of data, or any features for supporting such replication. On the other hand, Claim 21 explicitly requires "creating replicas", and "adding one or more replicated objects ... to register said one or more replicated objects for replication...." Based upon the reasons stated above, it is respectfully submitted that amended Claim 7 is allowable over the art of record.

Claims 22 - 25 depend on Claim 21, and therefore contain all the limitations recited in Claim 21. It is therefore respectfully submitted Claims 22 - 25 are allowable for the reasons given above with respect to Claim 21. In addition, Claims 22 -25 recite additional features which render these claims patentable.

For example, Claim 23 requires "maintaining a set of generated objects for each of said one or more replicated objects, said generated objects for supporting data replication." As discussed earlier, nothing in *Tirfing* discloses or suggests data replication, let alone the generation of objects for supporting data replication.

Claim 24 requires "maintaining a set of destinations to which each of said one or more replicated objects is replicated." As discussed earlier, nothing in *Tirfing* discloses or suggests data replication, let alone the maintaining of a set of destinations to which data is replicated.

For the reasons set forth above, it is respectfully submitted that all of the pending claims are now in condition for allowance. Therefore, the issuance of a formal Notice of Allowance is believed next in order, and that action is most earnestly solicited.


The Examiner is respectfully requested to contact the undersigned by telephone if it is believed that such contact would further the examination of the present invention.

Please charge any shortages or credit any overages to Deposit Account No. 12-2237.

Respectfully submitted,

LOWE, PRICE, LeBLANC & BECKER

Date: 1/26, 1998

  
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Brian D. Hickman  
Reg. No. 35,894  
99 Canal Center Plaza  
Suite 300  
Alexandria, VA 22314

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on 1-26-98 by Cathy Bachman